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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,178	01/25/2002	John Christian Hermansen	20837-007401	8444
26171	7590	10/21/2004	EXAMINER	
FISH & RICHARDSON P.C. 1425 K STREET, N.W. 11TH FLOOR WASHINGTON, DC 20005-3500			HWANG, JOON H	
			ART UNIT	PAPER NUMBER
			2162	

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/055,178	HERMANSEN ET AL.
	Examiner Joon H. Hwang	Art Unit 2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 02 July 2004.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 32-94 is/are pending in the application.

4a) Of the above claim(s) 1-31 is/are ~~withdrawn from consideration~~ <sup>Canceled</sup>.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 32-37,41-54,56-58,60-83 and 87-94 is/are rejected.

7) Claim(s) 38-40,55,59 and 84-86 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1/14/04 1/25/02

4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: 105 requirement attachment.

## DETAILED ACTION

1. The applicants canceled claims 1-31 and added new claims 32-94 in the amendment received on 7/2/2004.

The pending claims are 32-94.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 32-34, 42-48, 51-52, 76-80, and 88-89 are rejected under 35 U.S.C. 102(b) as being unpatentable over Oshika et al. ("Improved Retrieval Of Foreign Names From Large Database", 1988, IEEE, pages 480-487).

With respect to claim 32, Oshika teaches accessing an input name (section 1.0 on page 480 and section 2.0 on page 480-481). Oshika teaches determining multiple phonetic representations for a portion of the input name, each of the multiple phonetic representations being for a different pronunciation of the input name (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, section 5.0 on pages 485-486, and section 6.0 on page 486). Oshika teaches comparing each of the multiple phonetic representations of the portion of the input name to a phonetic representation of a portion of the known name (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, section 5.0 on pages 485-486, and section 6.0 on page 486).

Oshika teaches providing an indication of whether the input name matches the known name based on the comparing (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, section 5.0 on pages 485-486, and section 6.0 on page 486).

With respect to claim 33, Oshika teaches classifying the input name as belonging to a particular culture (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, and section 6.0 on page 486). Oshika teaches selecting a rule based on the classifying of the input name (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, section 4.0 on page 485, and section 6.0 on page 486). Oshika teaches applying the rule in determining the multiple phonetic representations for the portion of the input name (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, section 4.0 on page 485, and section 6.0 on page 486).

With respect to claim 34, Oshika teaches classifying the input name as belonging to a particular culture (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, and section 6.0 on page 486). Oshika teaches selecting a multiple rules based on the classifying of the input name (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, section 4.0 on page 485, and section 6.0 on page 486). Oshika teaches applying the multiple rules in determining the multiple phonetic representations for the portion of the input name (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, section 4.0 on page 485, and section 6.0 on page 486).

With respect to claim 42, Oshika teaches comparing each of the multiple phonetic representations of the portion of the input name to a second phonetic

representation of the portion of the known name (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, section 4.0 on page 485, and section 6.0 on page 486).

With respect to claim 43, Oshika teaches accessing a character representation of the input name (section 1.0 on page 480, section 2.0 on page 480-481, and section 3.0 on page 481),

With respect to claim 44, Oshika teaches generating name variants using a string rewriting rules based on pronunciations (section 1.0 on page 480).

With respect to claim 45, Oshika teaches the character representation of the input name reflects a spelling from a specific culture and determining multiple phonetic representations comprises using a rule for determining phonetic representations, the rule being based on the specific culture (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, section 4.0 on page 485, and section 6.0 on page 486).

With respect to claim 46, Oshika teaches the character representation of the input name reflects a spelling from a specific culture, the input name belongs to another culture that is different from the specific culture, and determining multiple phonetic representations comprises using a rule for determining phonetic representations, the rule being based on the specific culture (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, section 4.0 on page 485, and section 6.0 on page 486).

With respect to claim 47, Oshika teaches the character representation of the input name reflects a spelling from a specific culture, the input name belongs to another culture that is different from the specific culture, and determining multiple phonetic representations comprises using a rule for determining phonetic representations, the rule being based on the other culture (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, section 4.0 on page 485, and section 6.0 on page 486).

With respect to claim 48, Oshika teaches the character representation of the input name reflects a spelling from a specific culture, the input name belongs to the specific culture, and determining multiple phonetic representations comprises using a rule for determining phonetic representations, the rule being based on the specific culture (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, section 4.0 on page 485, and section 6.0 on page 486).

With respect to claim 51, Oshika teaches comparing, for at least one of the multiple phonetic representations of the portion of the input name, corresponding parts of the at least one phonetic representation of the portion of the input name and the phonetic representation of the portion of the known name (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, section 4.0 on page 485, and section 6.0 on page 486).

With respect to claim 52, Oshika teaches parts that correspond at a syntactic level (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, and section 4.0 on page 485).

With respect to claims 76-77, Oshika teaches accessing a portion of a complete name or the entire input name (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, section 4.0 on page 485, and section 6.0 on page 486).

The limitations of claims 78-80 are rejected in the analysis of claims 32-34 above, and these claims are rejected on that basis.

The limitations of claim 88 are rejected in the analysis of claim 42 above, and the claim is rejected on that basis.

The limitations of claim 89 are rejected in the analysis of claim 51 above, and the claim is rejected on that basis.

#### ***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 35-37, 41, 49-50, 53-54, 57-58, 60-75, 81-83, 87, and 90-94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oshika et al. ("Improved Retrieval Of Foreign Names From Large Database", 1988, IEEE, pages 480-487) in view of Hermansen ("Automatic Name Searching in Large Data Bases of International Names," 1985).

With respect to claims 35 and 37, Oshika does not explicitly disclose determining articulatory similarity between at least one of the multiple phonetic representations of the portion of the input name and the phonetic representation of the portion of the known name. However, Hermansen teaches generating name variants based on

phonetic, phonetic equivalence or phonic coding, which try to combine similar sounding consonant teaching articulatory (section 2.5 on page 23-24, section 2.5.2 on pages 28-30, and chapter 4 on pages 68-83). Hermansen also teaches providing an indication of similarity between the input name and the known name, wherein the input name is the variant based on the phonetic representation (section 2.1 on pages 15-16, section 3.2 on page 46-50, section 3.3 on pages 52-55, and section 3.4 on pages 55-59). Thus, these teach articulatory similarity. Hermansen further teaches determining articulatory similarity based on a culture-specific rule (chapter 2 on pages 14-41 and chapter 4 on pages 68-83). Therefore, based on Oshika in view of Hermansen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Hermansen to the system of Oshika for articulatory similarity in order to measure a likelihood of a name matching.

With respect to claim 36, Oshika does not explicitly disclose determining articulatory similarity. However, Hermansen teaches identifying an articulatory variation between one or more of the multiple phonetic representations of the portion of the input name and the phonetic representation of the portion of the known name, classifying the articulatory variation as likely or unlikely, and wherein determining articulatory similarity comprises attributing less significance to the articulatory variation, so as to indicate greater articulatory similarity, if the articulatory variation is likely than if the articulatory variation is unlikely (chapter 2 on pages 14-41, chapter 3 on pages 42-67, chapter 4 on pages 68-83, chapter 5 on pages 84-110, and chapter 6 on pages 111-137). Therefore, based on Oshika in view of Hermansen, it would have been obvious to one having

ordinary skill in the art at the time the invention was made to utilize the teachings of Hermansen to the system of Oshika for articulatory similarity in order to search and measure a likelihood of a name matching effectively.

With respect to claim 41, Oshika teaches name variants in phonetic representations (section 1.0 on page 480, section 2.0 on page 480-481, section 3.0 on page 481, section 4.0 on page 485, and section 6.0 on page 486). Oshika does not explicitly disclose phonetic representation based on an IPA. However, Hermansen teaches determining multiple phonetic representations comprises determining multiple representation that are each based on an IPA (section 4.1 on pages 68-71) for another way of a name transcription. Therefore, based on Oshika in view of Hermansen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Hermansen to the system of Oshika for an IPA in order to have another way of a name transcription.

With respect to claims 49-50, Oshika does not explicitly disclose providing an indication that the input name exactly or not exactly matches the known name. However, Hermansen teaches providing an indication of similarity between the input name and the known name (section 2.1 on pages 15-16, section 3.2 on page 46-50, section 3.3 on pages 52-55, and section 3.4 on pages 55-59). Therefore, based on Oshika in view of Hermansen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Hermansen to the system of Oshika for an indication of a similarity between the input name and the known name in order to measure a likelihood of a name matching.

With respect to claims 53-54, Oshika does not explicitly disclose parts that correspond at a syllabic level. However, Hermansen teaches parts that correspond at a syllabic level including a first part that relates to a left-most syllable of the portion of the input name and a second part that relates to a left-most syllable of the portion of the known name (chapter 4 on pages 68-83 and chapter 6 on pages 111-137) for an effective name searching. Therefore, based on Oshika in view of Hermansen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Hermansen to the system of Oshika for syllabic level of parts in order to search and match names effectively.

With respect to claims 57-58, Oshika does not explicitly disclose parts that correspond at a morphologic level and at a phonologic level. However, Hermansen teaches parts that correspond at a morphologic level and at a phonologic level (chapter 2 on pages 14-41, chapter 4 on pages 68-83, and chapter 6 on pages 111-137) for an effective name searching. Therefore, based on Oshika in view of Hermansen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teaching of Hermansen to the system of Oshika for a morphologic and a phonologic level of parts in order to search and match names effectively.

With respect to claim 60, Oshika does not explicitly disclose comparing sonority level. However, Hermansen teaches generating name variants based on phonetic, phonetic equivalence or phonic coding, which try to combine similar sounding consonant teaching sonority (section 2.5 on page 23-24, section 2.5.2 on pages 28-30, and chapter 4 on pages 68-83). Hermansen also teaches providing an indication of

similarity between the input name and the known name, wherein the input name is the variant based on the phonetic representation (section 2.1 on pages 15-16, section 3.2 on page 46-50, section 3.3 on pages 52-55, and section 3.4 on pages 55-59). Thus, these teach a sonority level comparing. Therefore, based on Oshika in view of Hermansen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Hermansen to the system of Oshika for a sonority level comparing in order to search and measure a likelihood of a name matching effectively.

With respect to claims 61-63, Oshika does not explicitly disclose a rank-ordered list of names. However, Hermansen teaches providing a rank-ordered list of names including the known name, with rank-order indicating a likelihood of matching the input name (chapter 2 on pages 14-41). Hermansen teaches generating name variants based on phonetic, phonetic equivalence or phonic coding, which try to combine similar sounding consonant teaching articulatory (section 2.5 on page 23-24, section 2.5.2 on pages 28-30, and chapter 4 on pages 68-83). Hermansen also teaches providing an indication of similarity between the input name and the known name, wherein the input name is the variant based on the phonetic representation (section 2.1 on pages 15-16, section 3.2 on page 46-50, section 3.3 on pages 52-55, and section 3.4 on pages 55-59). Thus, these teach articulatory similarity. Therefore, based on Oshika in view of Hermansen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Hermansen to the system of Oshika for ranking in order to measure a likelihood of a name matching.

With respect to claim 64, Oshika does not explicitly disclose comparing sonority level. However, Hermansen teaches generating name variants based on phonetic, phonetic equivalence or phonic coding, which try to combine similar sounding consonant teaching sonority (section 2.5 on page 23-24, section 2.5.2 on pages 28-30, and chapter 4 on pages 68-83). Hermansen also teaches providing an indication of similarity between the input name and the known name, wherein the input name is the variant based on the phonetic representation (section 2.1 on pages 15-16, section 3.2 on page 46-50, section 3.3 on pages 52-55, and section 3.4 on pages 55-59). Thus, these teach a sonority level comparing. Hermansen teaches providing a rank-ordered list of names, with rank-order indicating a likelihood of matching the input name (chapter 2 on pages 14-41). Therefore, based on Oshika in view of Hermansen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Hermansen to the system of Oshika for a sonority level comparing in order to search and measure a likelihood of a name matching effectively.

With respect to claim 65, Oshika does not explicitly disclose a morphological element. However, Hermansen teaches determining whether the known name includes a morphological element and providing a rank-ordered list of names, with rank-order indicating a likelihood of matching the input name (chapter 2 on pages 14-41, chapter 4 on pages 68-83, chapter 5 on pages 84-110, and chapter 6 on pages 111-137). Therefore, based on Oshika in view of Hermansen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings

of Hermansen to the system of Oshika for a morphological comparing in order to search and measure a likelihood of a name matching effectively. .

With respect to claim 66, Oshika does not explicitly disclose a rank-ordered list of names. However, Hermansen teaches comparing, for at least one of the multiple phonetic representations of the portion of the input name, an initial sound of the at least one of the multiple phonetic representations of the portion of the input name and an initial sound of the phonetic representation of the portion of the known name and providing a rank-ordered list of names including the known name, with rank-order indicating a likelihood of matching the input name (chapter 2 on pages 14-41, chapter 4 on pages 68-83, chapter 5 on pages 84-110, and chapter 6 on pages 111-137). Therefore, based on Oshika in view of Hermansen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Hermansen to the system of Oshika for a ranking in order to search and measure a likelihood of a name matching effectively.

With respect to claims 67-68, Oshika does not explicitly disclose comparing syllabic structure. However, Hermansen teaches comparing, for at least one of the multiple phonetic representations of the portion of the input name, syllabic structure of the at least one of the multiple phonetic representations of the portion of the input name and the phonetic representation of the portion of the known name and providing a rank-ordered list of names including the known name, with rank-order indicating a likelihood of matching the input name (chapter 2 on pages 14-41, chapter 4 on pages 68-83, chapter 5 on pages 84-110, and chapter 6 on pages 111-137). Therefore, based on

Oshika in view of Hermansen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Hermansen to the system of Oshika for comparing syllabic structure in order to search and measure a likelihood of a name matching effectively

With respect to claim 69, Oshika does not explicitly disclose comparing location of stress. However, Hermansen teaches comparing, for at least one of the multiple phonetic representations of the portion of the input name, location of stress in the at least one of the multiple phonetic representations of the portion of the input name and the phonetic representation of the portion of the known name and providing a rank-ordered list of names including the known name, with rank-order indicating a likelihood of matching the input name (chapter 2 on pages 14-41, chapter 4 on pages 68-83, chapter 5 on pages 84-110, and chapter 6 on pages 111-137). Therefore, based on Oshika in view of Hermansen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Hermansen to the system of Oshika for a location of stress in order to search and measure a likelihood of a name matching effectively.

With respect to claim 70, Oshika does not explicitly disclose orthographic similarity. However, Hermansen teaches comparing, for at least one of the multiple phonetic representations of the portion of the input name, orthographic similarity between the at least one of the multiple phonetic representations of the portion of the input name and the phonetic representation of the portion of the known name and providing a rank-ordered list of names including the known name, with rank-order

indicating a likelihood of matching the input name (chapter 2 on pages 14-41, chapter 4 on pages 68-83, chapter 5 on pages 84-110, and chapter 6 on pages 111-137).

Therefore, based on Oshika in view of Hermansen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Hermansen to the system of Oshika for orthographic similarity in order to search and measure a likelihood of a name matching effectively.

With respect to claim 71, Oshika does not explicitly disclose comparing includes discounting. However, Hermansen teaches comparing each of the multiple phonetic representations of the portion of the input name to the phonetic representation of the portion of the known name comprises discounting, for at least one of the multiple phonetic representations of the portion of the input name, an occurrence of a likely articulatory variation between the at least one of the multiple phonetic representation of the portion of the input name and the phonetic representation of the portion of the known name (chapter 3 on pages 42-67, chapter 4 on pages 68-83, and chapter 6 on pages 111-137). Therefore, based on Oshika in view of Hermansen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Hermansen to the system of Oshika for comparing includes discounting in order to search and measure a likelihood of a name matching effectively.

With respect to claims 72-75, Oshika does not explicitly disclose a particle in the input name. However, Hermansen teaches identifying a particle in the input name and attributing less significance to the particle, than to another part of the input name, in providing the indication of whether the input name matches the known name, wherein

the particle comprises an affix. Hermansen also teaches deciding not to determine and compare a phonetic representation of the particle attributed less significance for faster search processing (chapter 3 on pages 42-67, chapter 4 on pages 68-83, chapter 5 on pages 84-110, and chapter 6 on pages 111-137). Therefore, based on Oshika in view of Hermansen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the teachings of Hermansen to the system of Oshika for a particle in the input name in order to search and match names effectively.

The limitations of claims 81-83 are rejected in the analysis of claims 35-37 above, and these claims are rejected on that basis.

The limitations of claim 87 are rejected in the analysis of claim 41 above, and the claim is rejected on that basis.

The limitations of claims 90-91 are rejected in the analysis of claims 53-54 above, and these claims are rejected on that basis.

The limitations of claims 92-94 are rejected in the analysis of claims 60-62 above, and these claims are rejected on that basis.

#### ***Allowable Subject Matter***

6. Claims 38-40, 55-56, 59, and 84-86 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 38 identifies the distinct feature, determining articulatory similarity between at least one of the multiple phonetic representations of the portion of the input name and

the phonetic representation of the portion of the known name comprises determining, for the at least one of the multiple phonetic representations of the portion of the input name, how many phonetic features are in common between corresponding portions of the at least one phonetic representation of the portion of the input name and the phonetic representation of the portion of the known name. The closest prior art, Oshika et al. ("Improved Retrieval Of Foreign Names From Large Database", 1988, IEEE, pages 480-487) and Hermansen ("Automatic Name Searching in Large Data Bases of International Names," 1985) disclosing a proper name matching/searching based on a culture of the proper name, fails to suggest the claimed limitation as mentioned above in combination with other claimed elements.

Claims 39 and 40, further depending from claim 38, are objected with the same reason above.

Claim 55 identifies the distinct feature, the first part further relates to both an initial phonologic element and a final phonologic element of the left-most syllable of the portion of the input name, and the second part further relates to an initial phonologic element and a final phonologic element of the left-most syllable of the portion of the known name. The closest prior art, Oshika et al. ("Improved Retrieval Of Foreign Names From Large Database", 1988, IEEE, pages 480-487) and Hermansen ("Automatic Name Searching in Large Data Bases of International Names," 1985) disclosing a proper name matching/searching based on a culture of the proper name, fails to suggest the claimed limitation as mentioned above in combination with other claimed elements.

Claim 56, further depending from claim 55, is objected with the same reason above.

Claim 59 identifies the distinct feature, parts that correspond at the phonologic level includes (i) a first part that relates to a final phoneme of the portion of the input name and (ii) a second part that relates to a final phoneme of the portion of the known name. The closest prior art, Oshika et al. ("Improved Retrieval Of Foreign Names From Large Database", 1988, IEEE, pages 480-487) and Hermansen ("Automatic Name Searching in Large Data Bases of International Names," 1985) disclosing a proper name matching/searching based on a culture of the proper name, fails to suggest the claimed limitation as mentioned above in combination with other claimed elements.

Claim 84 identifies the distinct feature, determining articulatory similarity between at least one of the multiple phonetic representations of the portion of the input name and the phonetic representation of the portion of the known name comprises determining, for the at least one of the multiple phonetic representations of the portion of the input name, how many phonetic features are in common between corresponding portions of the at least one phonetic representation of the portion of the input name and the phonetic representation of the portion of the known name. The closest prior art, Oshika et al. ("Improved Retrieval Of Foreign Names From Large Database", 1988, IEEE, pages 480-487) and Hermansen ("Automatic Name Searching in Large Data Bases of International Names," 1985) disclosing a proper name matching/searching based on a culture of the proper name, fails to suggest the claimed limitation as mentioned above in combination with other claimed elements.

Claims 85 and 86, further depending from claim 84, are also objected with the same reason above.

7. This Office action has an attached requirement for information under 37 CFR 1.105. A complete reply to this Office action must include a complete reply to the attached requirement for information. The time period for reply to the attached requirement coincides with the time period for reply to this Office action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joon H. Hwang whose telephone number is 703-305-6469 (571-272-4036 after 10/21/2004). The examiner can normally be reached on 9:30-6:00(M~F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN E BREENE can be reached on 703-305-9790 (571-272-4107 after 10/21/2004). The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Joon Hwang  
10/17/04



JEAN M. CORRIELUS  
PRIMARY EXAMINER



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FROM : JOHN BREENE  
SPE, TC2100

SUBJECT: 105 Requirement for the patent application 10/055,178

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

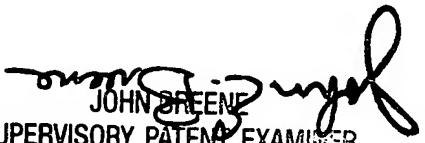
- 1) The information is required to enter in the record documents, dated before 3/25/1998, especially software manuals, that were suggested by the applicant as relevant to this examination in the specification, lines 11-17 on page 5, about PC-NAS.
- 2) In addition, the information is required to identify products and services, dated before 3/25/1998, embodying the disclosed subject matter of recited claim languages, such as LAS Suite of Tools that includes NameCheck, NameClassifier, NameRegularizer, Intelligent Search Data Generator, and PhoneticNameKey tools disclosed in a web-site "[www.las-inc.com](http://www.las-inc.com)" in Oct 21, 1997 (retrieved from [www.archive.org](http://www.archive.org) with a search key of "[www.las-inc.com](http://www.las-inc.com)") and identify the properties of similar products and services found in the prior art, dated before 3/25/1998.

In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure.

The fee and certification requirements of 37 CFR 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37 CFR 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement under 37 CFR 1.105 are subject to the fee and certification requirements of 37 CFR 1.97.

The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete reply to the requirement for that item.

This requirement is an attachment of the enclosed Office action. A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.



JOHN GREENE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100